

REMARKS

Applicants request reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks.

Claims 1, 3, and 25 are pending in the present application. Claims 1, 3, and 25 are independent claims. Claims 2, 5-24 and 26-29 have been cancelled without prejudice to or disclaimer of the subject matter recited therein.

Claims 1, 3, and 25 have been amended. No new matter has been added.

The Office Action objected to claims 1 and 3. These objections are addressed in turn.

Regarding claim 1, it was alleged that the recitation of "having one of an area equal to and an area smaller than that of the first trench" was not possible because such a recitation requires that the area of the second trench cannot be simultaneously equal to and smaller than the area of the first trench. Applicants agree that these conditions cannot be simultaneously met. However, that is not what was claimed. Rather, the construction "having one of A and B" is a long-accepted alternative recitation. Nonetheless, in order to render the claims even more clear for examination, Applicants have amended independent claims 1 and 25 (which recites a similar feature) in view of the Examiner's comments to recite the subject alternative recitation using "or."

Regarding claim 3, it was alleged that the recitation of "separating distance" lacked antecedent basis. In response, attention is respectfully directed to the seventh line of independent claim 1 and now the seventh line of independent claim 3 whereat "a separating distance" is recited.

Accordingly, favorable consideration is respectfully requested.

Claims 1, 3, and 25 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,387,314 (Baughman et al.). Claim 2 was rejected under 35 U.S.C. § 103 as being unpatentable over Baughman et al. in view of U.S. Patent No. 4,82,595 (Trueba et al.). All rejections are respectfully traversed.

Independent claims 1 and 25 recite, inter alia, that a first trench has a depth from 5µm to less than 15µm.

Independent claim 3 recites, inter alia, a first trench formed at a first surface of a substrate in a first pattern having a separating distance from at least one of inlets of ink

chambers and connecting portions between the adjacent ink chambers and that the separating distance is from 1 μ m to 5 μ m.

However, Applicants respectfully submit that neither Baughman et al. nor Trueba et al. teaches at least the aforementioned features. Thus, without conceding the propriety of the asserted combination, it is respectfully submitted that the asserted combination is likewise deficient.

Baughman et al. relates to the fabrication of ink fill slots in thermal ink-jet printheads utilizing chemical micromachining and discusses an arrangement including an ink fill slot 18 and an extended portion 18a. (Baughman et al., FIGS. 3 and 4).

The Office Action, in rejecting cancelled claim 2, concedes that Baughman et al. does not teach or suggest that a first trench has a depth of from 5 μ m to 20 μ m. (Office Action, page 5). Nonetheless, the Office Action contends that Trueba et al. provides the necessary teaching by stating that “[t]he height of the (ink feed) channel 10 ranges from 15-30 μ m.” (Office Action, page 5, citing Trueba et al., Col. 5, lines 37-43).

However, amended independent claims 1 and 25 now recite that a first trench has a depth from 5 μ m to less than 15 μ m. Thus, neither Baughman et al. nor Trueba et al. teaches or suggests all of the features of independent claims 1 and 25.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 1 and 25 are respectfully requested.

The Office Action, in rejecting claim 3, contends that Baughman et al. teaches, at Col. 7, lines 46-57, a separating distance from 1 μ m to 5 μ m. (Office Action, page 4). This contention is respectfully traversed.

The cited portion of Baughman et al. relates to a shelf length and a review of the cited portion of Baughman et al. shows that the only range discussed is a preferable range of a shelf length of between 10 μ m -50 μ m. Absent from Baughman et al. is any teaching of a shelf length between 1 μ m to 5 μ m. Indeed, even FIG. 7 of Baughman et al., which is a chart of pen frequency vs. shelf length, shows a length range of about 30 μ m to 350 μ m. Thus, Baughman et al. cannot anticipate claim 3.

In view of the foregoing, Applicants respectfully submit that the independent claims patentably define the present invention over the citations of record. Further, the dependent claims should also be allowable for the same reasons as their respective base claims and

further due to the additional features that they recite. Separate and individual consideration of the dependent claims is respectfully requested.

Applicants believe that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action. However, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.

There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 2-15-06

By: Michael E. Kondoudis
Michael E. Kondoudis
Registration No. 42,758

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501